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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,834	10/30/2003	Hiroshi Shirai	21334-1272	9122

29450 7590 11/19/2004  
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EXAMINER

DUVERNE, JEAN F

ART UNIT PAPER NUMBER

2839

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/696,834

Applicant(s)

SHIRAI ET AL.

Examiner

Jean F. Duverne

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14-26 and 28-30 is/are rejected.
- 7) ☒ Claim(s) 12, 13, 27 and 31-34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-7, 10-11, 14-16, 18-21, 25-26, 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter (US005387120A).

Carter's device discloses a connector or grid socket (18) , comprising: an insulative housing at 13 having a plurality of contacts 41 the insulative housing having a top surface for receiving a socket array package (70); a cover member (14) pivotally mounted on first end of the insulative housing, the cover member being pivotal between an open position and a closed position where the cover member presses the land grid array package in reference to the top surface of the insulative housing so that the land grid array package electrically connects to the contacts; a lever at 18 pivotally mounted on a second end of the insulative housing, the lever having a locking portion at 60 for locking the cover member in the closed position; and a reinforcing plate (12) positioned on a bottom surface of the housing and being one piece extending in the periphery of the housing, the metallic reinforcing plate extending between the first end and the second end of the insulative housing; wherein the metallic reinforcing plate includes an interlocking portion formed to lock the lever; the metallic reinforcing plate having projections extending into the housing; the cover being pivotally supported by the

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reinforcing plate; the cover being mounted around a bearing tongue at 51 mounted around an axis of a shaft (49) on which the cover member is mounted. However, Ma's device fails to explicitly disclose the material of which the reinforcement plate. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the reinforcement plate made of metal instead of plastic, since it has been held to be within the general skill of a worker in the art to select known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the reinforcement plate made of metal in order to meet the system design and requirement.

2. Claims 8-9, 22-23 and 17, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter (US005387120A ) in view McHugh et al (US 20040032720A1).

In regard to claims 8-9, 22-23, Carter's device discloses the aforementioned limitations, but fails to explicitly disclose the shape of the cover member. McHugh's device discloses the cover at 65 with the concave shape or larger curvature area to accommodate the package. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the cover with the concave shape or larger curvature area in order to accommodate the package and retain the package in a stable position.

In regard to claims 17, 24, Carter's device discloses the aforementioned limitations, but fails to explicitly disclose the use of the heat sink mounted on the upper

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surface of the socket. McHugh's device discloses the use of the heat sink placing on the upper surface of the socket. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the heat sink mounted on the upper surface of the socket such as the one disclosed in McHugh's device in order to improve the heat dissipation in the system (see paragraph 0005).

### ***Conclusion***

3. Claims 12-13, 27, and 31-34 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art fails to disclose the heat pressing of the projection into the mounting slots of the housing and the bending features of the actuation portion with the rest of the claims limitations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean F. Duverne whose telephone number is (571) 272-2091. The examiner can normally be reached on 9:00-7:30, Monday-Thursday.

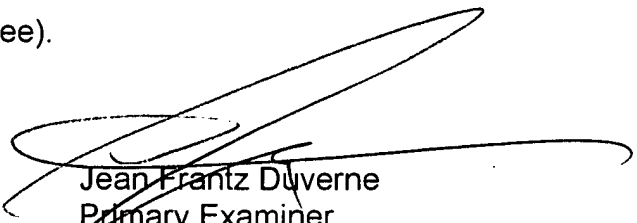
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FD

11/10/2004



Jean Frantz Duverne  
Primary Examiner  
Art Unit 2839